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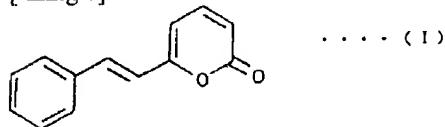
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CLAIMS

[Claim]

[Claim 1] The ultraviolet ray absorbent which consists of 5 and 6-***** wine shown in the following general formula (I).

[-izing 1]



[Claim 2] The charge of makeup containing the ultraviolet ray absorbent of claim 1 publication.

[Claim 3] The charge of makeup of the claim 2 publication whose content of the aforementioned ultraviolet ray absorbent is 0.01 - 10 % of the weight to the charge whole quantity of makeup.

[Translation done.]

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DETAILED DESCRIPTION

[Detailed description]

[0001]

[Field of the Invention] this invention relates to the charge of makeup which is excellent in a skin protection effect from the ultraviolet rays which contain in detail the ultraviolet ray absorbent and this which consist of 5 and 6-***** wine about the charge of makeup containing an ultraviolet ray absorbent and this.

[0002]

[Prior art] Since there are inflammation and danger of carcinoma-cutaneum induction in recent years, the consciousness of the consumer about the skin protection from ultraviolet rays is increasing focusing on ultraviolet-rays B. Furthermore, it is pointed out at many societies that it is not desirable on safety about ultraviolet-rays A, and the need for the protection to this is emphasized.

[0003] In such status, before it blended with the charge of makeup ultraviolet ray absorbents, such as the technique of scattering ultraviolet rays by blending masking reagents, such as titanium oxide, with the charge of makeup as the technique of the protection to ultraviolet rays, and a benzophenone derivative, a cinnamic acid derivative, a p-aminobenzoic-acid derivative, until now and ultraviolet rays resulted in the skin in the field of the charge of makeup, the technique which they are made to absorb was taken.

[0004] However, in the protection by dispersion by titanium oxide, if the titanium oxide of an amount effective in a protection is blended, though a receptacle will become unusual white about the influence of the appearance color of titanium oxide or a colored pigment besides a metaphor will be blended and toned, it becomes a result of thick sensibility, and unnatural sensibility may have been given to others. Moreover, the conventional ultraviolet ray absorbent did not have few problems on the grade suspected to be the causative agent of a delayed type allergy, and safety, either. Furthermore, since it did not have the operation which absorbs ultraviolet-rays A even if ultraviolet-rays B is absorbable, it could not do the protection to ultraviolet-rays A at all, and the old ultraviolet ray absorbent was not able to say what ** that an ultraviolet-rays protection operation is enough, either.

[0005] On the other hand, although it is the compound with which 5 and 6-***** wine is the known matter, and existing in the bark of spicebush is known, it is not known that this compound has a ultraviolet-absorption operation, and this is blended with the charge of makeup and the report which was going to protect the skin from ultraviolet rays is not known at all, either.

[0006]

[Object of the Invention] Let it be a technical problem to offer the charge of makeup which this invention was made from the above-mentioned viewpoint, was excellent in the operation which absorbs both ultraviolet-rays A and ultraviolet-rays B, and was excellent in the protection operation of the skin from the ultraviolet ray absorbent which was excellent in safety further, and the ultraviolet rays containing this.

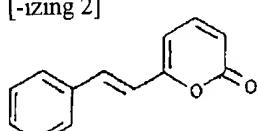
[0007]

[The means for solving a technical problem] In order that this invention persons may solve the above-mentioned technical problem, a ultraviolet-absorption spectrum about various organic compounds against an index The place which hunted ultraviolet-rays A and area B for [the matter which has strong absorption], It finds out that the charge of makeup which has the absorption 5 and 6-***** wine shown in a general formula (I) excelled [absorption] in both the fields of ultraviolet rays A and B, and found out excelling also in safety further, and blended this is excellent in a protection operation of the skin from ultraviolet rays, and came to complete this invention.

[0008] That is, this invention is a charge of makeup containing the ultraviolet ray absorbent and this which consist of 5 and 6-***** wine shown in the following general formula (I).

[0009]

[-izing 2]



... (I)

[0010] The ultraviolet ray absorbent of the ultraviolet ray absorbent this invention of <1> this invention consists of 5 expressed with the aforementioned general formula (I), and 6-***** wine.

[0011] It is known that the above 5 and 6-***** wine exist by high concentration in the bark of the spicebush which is the

vegetation of a Lauraceae. What is necessary is to add the polar solvent of an amount to the bark of spicebush one to 20 times, to heat at the temperature a room temperature or near the boiling point of a solvent for example, and just to extract, although it is the technique of obtaining 5 and 6-***** wine from the bark of spicebush. At this time, even if it may use the bark of the spicebush of a raw material as it is, and it carries out pretreatments, such as xeransis, a fragment, and trituration, and it uses, it is not cared about. If it is a room temperature, if extraction time is under heating, several hours are suitable for it several days. Thus, after removing a solvent from the extract obtained, 5 and 6-***** wine which is the ultraviolet ray absorbent of this invention is obtained by refining by usual technique, such as liquid-liquid extraction and a column chromatography.

[0012] Moreover, as a polar solvent used for the above-mentioned extraction, nitril, such as ester, such as halogenated hydrocarbons, such as ether, such as ketones, such as alcohols, such as a methanol and ethanol, an acetone, and a methyl ethyl ketone, diethylether, and a tetrahydrofuran, chloroform, and a methylene chloride, ethyl acetate, and methyl formate, and an acetonitrile, water, etc. can be illustrated suitably. Moreover, a kind may be independently used for these polar solvents, and several sorts may be mixed and used for them.

[0013] Thus, 5 and 6-***** wine obtained has absorption in both the fields of ultraviolet regions A and B, and % absorbance coefficient of the maximum absorption wavelength (346nm) in ultraviolet-rays area A is very as high as 1025, and is especially suitable as an ultraviolet ray absorbent of this invention. Moreover, in the state of a solution, this compound will be almost changeless for 23 days also under a 40-degree C condition, and can be said that it excels also in the stability.

[0014] The charge of makeup of the charge this invention of makeup of <2> this inventions blends the above-mentioned ultraviolet ray absorbent. The desirable loadings of the above-mentioned ultraviolet ray absorbent in the charge of makeup of this invention are 0.01 - 10 % of the weight, and it is more desirable that it is 0.1 - 5 % of the weight. even if the loadings of an ultraviolet ray absorbent cannot say [ultraviolet-absorption ability] that it comes out enough at less than 0.01 % of the weight, but the protection effect of the skin from ultraviolet rays may become inadequate and it blends exceeding 10 % of the weight, it is ineffective for reaching the ceiling, and is not sometimes economical. Moreover, the protection effect of the skin from ultraviolet rays is remarkable, and also economically the advantageous domain of ultraviolet ray absorbent loadings is mentioned above, and it depends, and is the domain of desirable loadings, i.e., 0.1 - 5 % of the weight.

[0015] The various arbitrary components usually used for the charge of makeup of this invention at the charge of makeup other than the above-mentioned ultraviolet ray absorbent, For example, hydrocarbons, such as vaseline, squalane, and a liquid paraffin, a jojoba oil, Ester, such as a carnauba wax, synthetic spermaceti, and yellow bees wax, olive oil, Triglyceride, such as hydrogenation palm oil, the castor oil, and beef tallow, cetyl alcohol, Higher alcohol, such as oleyl alcohol, a behenyl alcohol, and a batyl alcohol Nonionic surface active agents, such as higher fatty acids, such as stearin acid and an oleic acid, stearin acid monoglyceride, and polyoxyethylene hydrogenated castor oil Anionic surface active agents, such as a sodium lauryl sulfate and sulfo succinic-acid ester Amphoteric surface active agents, such as cationic surface active agents, such as an alkylamine hydrochloride, and an alkyl betaine Polyhydric alcohol, such as a glycerol and 1 and 3-butanediol, ethanol, Antiseptics, such as lower alcohols, such as propanol, paraben, and chlorhexidine glyconate Antioxidants, such as vitamin E and butylhydroxytoluene, Cyamopsis Gum, **** agents, such as thickeners, such as gum arabic and a carboxyvinyl polymer, and a polyethylene glycol, silica gel, perfume, and coloring matter, ginseng extractives, and a sterol glycoside, etc. is chosen suitably, and is blended.

[0016] Moreover, the ultraviolet ray absorbents or ultraviolet-rays defense agents other than 5 which is an ultraviolet ray absorbent, and 6-***** wine may be blended with the charge of makeup of this invention, and the inorganic fine particles which have the operation which scatters the ultraviolet rays like ultraviolet ray absorbents and titanium oxide, such as a benzophenone derivative, an aminobenzoic-acid derivative, and cinnamic acid lead, or a zinc oxide as such a component, for example are mentioned to it.

[0017] The pharmaceutical form of the charge of makeup of this invention has the desirable charge of basic makeup applied to the skin like a cream, a milky lotion, and face toilet, for example, although especially limitation is not carried out. Moreover, you may blend with the charges of makeup makeup, such as the eye color, the cheek color, foundation, and an undershirt makeup. These can be manufactured by the same technique as the usual charge of makeup except blending 5 and 6-***** wine which is the ultraviolet ray absorbent of this invention.

[0018]

[Example] Below, the example of this invention is explained. First, the example of the ultraviolet ray absorbent of this invention is explained.

[0019]

[Example 1] Methanol 5L was added to 1.7kg of the resins of the manufacture spicebush of 5 and 6-***** wine, and heating reflux of 3 hours was performed. After having filtered the obtained extract and removing insoluble matter, vacuum concentration removed the extracting solvent from filtrate. only the chloroform layer was taken out after this, after having added chloroform and 1L of water at a time to the obtained concentrate and performing liquid-liquid extraction Chloroform was removed from this solution, the silica gel column chromatography refined the obtained crude object (elution solvent; chloroform:methanol =100:0 ->50:50), and 234mg 5 and 6-***** wine (ultraviolet ray absorbent 1) was obtained.

[0020] Three kinds of following examinations were performed about the safety of 5 and 6-***** wine (ultraviolet ray absorbent 1) obtained by the <evaluation of ultraviolet ray absorbent of this invention> above.

[0021] (1) The regions of back of six endermic toxicity-test Hartley system male guinea pigs (300 to 350 g) by the guinea pig

were ****ed, and three 2x2cm sites were made. About one of places of it, it considered as the non-taken a measure control site, and nothing was operated after ****. Vaseline 0.05g was applied to one of the two remaining places as vehicle control. One place which remains applied 0.05g of the things which ****ed the ultraviolet ray absorbent 1 in vaseline at 10% of the weight of a rate as an analyte medication site. Then, after (24 hours and 48 hours), the same analyte as the same part was similarly prescribed for the patient, 72 hours after the last medication, the skin reaction was used and the criteria of ***** of the following were judged.

[0022] (Criteria of *****)

- : Non-Reacted ** : *****+ : Positive-Reaction ++ : Reaction Accompanied by Edema [0023] The site of what ** did not accept a skin reaction, either, but the result was a judgment of (-). This shows that the ultraviolet ray absorbent of this invention is excellent in safety.

[0024] (2) Allergy sex test by the guinea pig (maximization test)

It ****ed ten regions of back of the male white kind Hartley system guinea pig of two groups at a time, and after having applied the sodium-lauryl-sulfate aqueous solution 1% and damaging ****, the closed patch only of the vaseline was carried out for what ****ed the ultraviolet ray absorbent 1 in vaseline at 1% of the weight of a rate among the trauma section of the one group to shoot to the trauma section of another group as a vehicle control group for 48 hours, respectively.

[0025] To the site in which the guinea pig of each group carried out the closed patch after (24 hours and 72 hours) the end of closing patch processing, in an ultraviolet ray absorbent inclusion vaseline medication group 10%DMSO physiological saline solution containing 1% of the weight of the ultraviolet ray absorbent 1, 10%DMSO physiological saline solution and the mixed emulsification object of 1:1 of FCA containing Freund's complete adjuvant (FCA) and 2% of the weight of the ultraviolet ray absorbent 1 in a vehicle control group Intradermal injection of a total of every two places and six places was performed for the mixture of 1:1 of 10%DMSO physiological saline solution, FCA, and 10%DMSO physiological saline solution and FCA, respectively. The idle period for after [injection] ten days was set, after that, the closed patch of 24 hours was performed and the *** reaction was seen. the *** concentration of an ultraviolet ray absorbent 1 -- 1 % of the weight and 0.1 % of the weight -- ** -- it carried out and vaseline was used for the vehicle After (after [closed patch elimination] 1 hour and, and 24 hours), the skin reaction was used and the criteria of ***** of the above were observed.

[0026] As for the result, the analyte medication site of what ** also showed-less reacting (-), and it became clear that the ultraviolet ray absorbent of this invention does not have allergy nature.

[0027] (3) the closed patch test in a man -- the closed patch of what applied the vaseline which contains an ultraviolet ray absorbent 1 by the 5 % of the weight concentration of 0.025g on a lint cloth here was carried out for 24 hours, having used 11 healthy boys' overarm inside section as the examination site The analyte was removed from the examination site after the closed patch end, and the skin reaction was observed for this country patch test criteria shown below after (the 1 hour and 24 hours) against the index.

[0028] (This country patch test criteria)

- : Non-Reacted ** : *****+ : Positive-Reaction ++ : Reaction Accompanied by Edema [0029] In the result, the reaction of the panelist of what ** at the time of observation of what ** did not react, either (-). This shows that the ultraviolet ray absorbent of this invention is excellent in safety. Next, the example of the charge of makeup containing the ultraviolet ray absorbent 1 obtained in the above-mentioned example 1 is explained. In addition, all the loadings shown below are the weight sections.

[0030]

[Examples 2 and 3] It cooled and face toilet was obtained, after having carried out heating churning of the prescription component shown in the face toilet table 1 and solubilizing it at 80 degrees C.

[0031]

[Table 1]

成 分	配 合 量 (重量部)	
	実施例 2	実施例 3
エタノール	1 5. 0	1 5. 0
1, 3-ブタンジオール	5. 0	5. 0
グリセリン	5. 0	5. 0
メチルパラベン	0. 2	0. 2
香料	0. 1	0. 1
実施例 1 の紫外線吸収剤 1	0. 05	0. 1
バラアミノ安息香酸オクチル	—	0. 1
精製水	79. 65	79. 5

[0032]

[Examples 4 and 5] In addition, A component and B component which are shown in the cream table 2 were emulsified gradually,

agitating B component for A component, respectively, after carrying out heating churning at 80 degrees C separately, a balance lump and. It cooled, agitating this and the cream was obtained.

[0033]

[Table 2]

成 分	配合量(重量部)	
	実施例4	実施例5
A	セタノール	1. 0
	合成ゲイロウ	2. 5
	ミツロウ	2. 5
	ステアリン酸	1. 0
	ワセリン	3. 0
	スクワラン	14. 0
	オリーブ油	6. 0
	トコフェロール	0. 1
	ブチルパラベン	0. 1
	グリセリルモノステアレート	2. 5
B	ギリセリン(25)ステアレート	2. 5
	実施例1の紫外線吸収剤1	1. 0
B	水酸化カリウム	0. 02
	精製水	55. 43
	1, 3-ブタンジオール	8. 0
	メチルパラベン	0. 25

[0034]

[Example 6] After *****ing A component of the foundation table 3, B component was added and it *****ed further. After heating this at 80 degrees C, add C component and it was made to distribute, and D component which carried out heating lysis at 80 more degrees C was added gradually, was emulsified, carried out churning cooling, and foundation was obtained.

[0035]

[Table 3]

成 分	配合量(重量部)
A	1, 3-ブタンジオール
	マルビトール
	メチルパラベン
	ジグリセリントリイソステアレート
B	流動パラフィン
	ブチルパラベン
	実施例1の紫外線吸収剤1
C	酸化チタン
	黄色酸化鉄
	ベンガラ
	タルク
D	精製水

[0036] The ultraviolet-rays protection operation of the charge of makeup of this invention was evaluated using the cream obtained in the <evaluation of charge of makeup of this invention> above-mentioned example 5.

[0037] Five boy panelists were made into the subject, and first, the color mixture light of 1:1 of SE lamp and BLB lamp was irradiated at a subject's lower crossarm inside section, and it asked for the minimum erythema concentration (MED) in this color

irradiated at a subject's lower crossarm inside section, the above-mentioned mixture light. Next, cream 0.025g of an example 5 was applied to a subject's lower crossarm inside section, the above-mentioned

color mixture light twice the quantity of light of MED was irradiated at the fraction, and the inflammatory reaction of the skin was observed after (10 hours and 24 hours) the irradiation end based on the above-mentioned this country patch test criteria. [0038] In the result, what ** did not react, either and it became clear that the protection to ultraviolet-rays B was carried out enough. Moreover, although the melanism of an irradiation site was observed after (ten days and 30 days) irradiation of light, it turns out that the site of what ** cannot accept a melanism, either but the protection to ultraviolet-rays A was fully also carried out.

[0039]

[Effect of the invention] The ultraviolet ray absorbent of this invention is excellent in the operation which absorbs both ultraviolet-rays A and ultraviolet-rays B, and is excellent also in safety further. Moreover, since the charge of makeup containing this has a ultraviolet-absorption property and is [it can protect the skin from ultraviolet rays and] excellent also in safety further, continuous duty is possible for it over a long period of time.

[Translation done.]